

STCW-F (Fishing) Chapter II

Appendix to STCW-F Chapter II Regulation 1

Minimum Knowledge Required for Certification of Skippers on Fishing Vessels of 24 Meters in Length and Over Operating in Unlimited Waters

Ref: www.edumaritime.net/stewf Source: IMO

1. The syllabus given below is compiled for examination of candidates for certification as skippers on fishing vessels of 24 meters in length and over operating in unlimited waters. Bearing in mind that the skipper has ultimate responsibility for the safety of the vessel and its crew at all times including during fishing operations, examination in these subjects shall be designed to test that the candidate has assimilated properly all available information that affects the safety of the vessel and its crew in accordance with the syllabus.
2. **Navigation and position determination**
 - 2.1. Voyage planning and navigation for all conditions:
 - 2.1.1. by acceptable methods of determining ocean tracks;
 - 2.1.2. within restricted waters;
 - 2.1.3. where applicable, in ice;
 - 2.1.4. in restricted visibility;
 - 2.1.5. where applicable, in traffic separation schemes; and
 - 2.1.6. in areas affected by tides or currents.
 - 2.2. Position determination:
 - 2.2.1. by celestial observations;
 - 2.2.2. by terrestrial observations, including the ability to use bearings from landmarks and aids to navigation such as lighthouses, beacons and buoys in conjunction with appropriate charts, notices to mariners and other publications to assess the accuracy of the resulting position fix; and

2.2.3. by using, to the satisfaction of the Party, modern ship electronic navigational aids as provided in fishing vessels, with specific reference to knowledge of their operating principles, limitations, sources of error, detection of misrepresentation of information and methods of correction to obtain accurate position fixing.

3. Watchkeeping

- 3.1. Demonstrate thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972, especially annexes II and IV concerned with safe navigation.
- 3.2. Demonstrate knowledge of Basic Principles to be Observed in Keeping a Navigational Watch as prescribed in chapter IV.

4. Radar navigation

- 4.1. Demonstrate, using a radar simulator or, when not available, manoeuvring board, knowledge of the fundamentals of radar and ability in the operation and use of radar, and in the interpretation and analysis of information obtained from the equipment, * including the following:
 - 4.1.1. factors affecting performance and accuracy;
 - 4.1.2. setting up and maintaining displays;
 - 4.1.3. detection of misrepresentation of information, false echoes, sea return;
 - 4.1.4. range and bearing;
 - 4.1.5. identification of critical echoes;
 - 4.1.6. course and speed of other ships;
 - 4.1.7. time and distance of closest approach of crossing, meeting or overtaking ships;
 - 4.1.8. detecting course and speed changes of other ships;
 - 4.1.9. effect of changes in own vessel's course or speed or both; and
 - 4.1.10. application of the International Regulations for Preventing Collisions at Sea, 1972.

* Reference is made to resolution 2 of the 1995 STCW-F Conference.

5. Magnetic and gyro-compasses

- 5.1. Ability, using terrestrial and celestial means, to determine and apply the errors of the magnetic and gyro-compasses.

6. Meteorology and oceanography

- 6.1. Knowledge of meteorological instruments and their application.
- 6.2. Ability to apply meteorological information available.
- 6.3. Knowledge of characteristics of various weather systems, including, at the discretion of the Party, tropical revolving storms and avoidance of storm centres and the dangerous quadrants.
- 6.4. Knowledge of weather conditions, such as fog, liable to endanger the vessel.
- 6.5. Ability to use appropriate navigational publications on tides and currents.
- 6.6. Ability to calculate times and heights of high and low water and estimate the direction and rate of tidal streams.

7. Fishing vessel manoeuvring and handling

- 7.1. Manoeuvring and handling of a fishing vessel in all conditions, including the following:
 - 7.1.1. berthing, unberthing and anchor work under various conditions of wind and tide;
 - 7.1.2. manoeuvring in shallow water;
 - 7.1.3. management and handling of fishing vessels in heavy weather, including appropriate speed, particularly in following and quartering seas, assisting a ship or aircraft in distress, means of keeping an unmanageable vessel out of a sea trough and lessening drift;
 - 7.1.4. manoeuvring the vessel during fishing operations, with special regard to factors which could adversely affect the vessel's safety during such operations;
 - 7.1.5. precautions in manoeuvring for launching rescue boats or survival craft in bad weather;
 - 7.1.6. methods of taking on board survivors from rescue boats or survival craft;
 - 7.1.7. where applicable, practical measures to be taken when navigating in ice, icebergs or conditions of ice accretion on board the vessel;
 - 7.1.8. the use of, and manoeuvring in, traffic separation schemes;
 - 7.1.9. the importance of navigating at reduced speed to avoid damage caused by own vessel's bow or stern wave;

- 7.1.10. transferring fish at sea to factory ships or other vessels; and
- 7.1.11. refuelling at sea.

8. Fishing vessel construction and stability

- 8.1. General knowledge of the principal structural members of a vessel and the proper names of the various parts.
- 8.2. Knowledge of the theories and factors affecting trim and stability and measures necessary to preserve safe trim and stability.
- 8.3. Demonstrate ability to use stability data, stability and trim tables and pre-calculated operating conditions.
- 8.4. Knowledge of effects of free surfaces and ice accretion, where applicable.
- 8.5. Knowledge of effects of water on deck.
- 8.6. Knowledge of the significance of weathertight and watertight integrity.

9. Catch handling and stowage

- 9.1. The stowage and securing of the catch on board vessels, including fishing gear.
- 9.2. Loading and discharging operations, with special regard to heeling moments from gear and catch.

10. Fishing vessel power plants

- 10.1. Operating principles of marine power plants in fishing vessels.
- 10.2. Vessel's auxiliary machinery.
- 10.3. General knowledge of marine engineering terms.

11. Fire prevention and fire-fighting appliances

- 11.1. Organization of fire drills.
- 11.2. Classes and chemistry of fire.
- 11.3. Fire-fighting systems.
- 11.4. Participation in an approved fire-fighting course.
- 11.5. Knowledge of provisions concerning fire-fighting equipment.

12. Emergency procedures

- 12.1. Precautions when beaching a vessel.
- 12.2. Action to be taken prior to, and after, grounding.

- 12.3. Action to be taken when the gear becomes fast to the ground or other obstruction.
- 12.4. Floating a grounded vessel, with and without assistance.
- 12.5. Action to be taken following a collision.
- 12.6. Temporary plugging of leaks.
- 12.7. Measures for the protection and safety of crew in emergencies.
- 12.8. Limiting damage and salving the vessel following a fire or explosion.
- 12.9. Abandoning ship.
- 12.10. Emergency steering, rigging and use of jury steering and the means of rigging a jury rudder, where practicable.
- 12.11. Rescuing persons from a ship in distress or from a wreck.
- 12.12. Man-overboard procedures.
- 12.13. Towing and being towed.

13. Medical care

- 13.1. Knowledge of first-aid procedures.
- 13.2. Knowledge of procedures for obtaining medical advice by radio.
- 13.3. A thorough knowledge of the use of the following publications:
 - 13.3.1. International Medical Guide for Ships or equivalent national publications; and
 - 13.3.2. Medical section of the International Code of Signals.

14. Maritime law

- 14.1. A knowledge of international maritime law as embodied in the international agreements and conventions as they affect the specific obligations and responsibilities of the skipper, particularly those concerning safety and the protection of the marine environment. Particular regard shall be paid to the following subjects:
 - 14.1.1. certificates and other documents required to be carried on board fishing vessels by international conventions, how they may be obtained and the period of their legal validity;
 - 14.1.2. responsibilities under the relevant requirements of the 1993 Torremolinos Protocol;
 - 14.1.3. responsibilities under the relevant requirements of chapter V of the International Convention for the Safety of Life at Sea, 1974;

- 14.1.4. responsibilities under Annex I and Annex V of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 thereto;
- 14.1.5. maritime declarations of health and the requirements of the international health regulations;
- 14.1.6. responsibilities under the Convention on International Regulations for Preventing Collisions at Sea, 1972; and
- 14.1.7. responsibilities under other international instruments affecting the safety of the ship and crew.
- 14.2. The extent of knowledge of national maritime legislation is left to the discretion of the Party, but shall include national arrangements for implementing applicable international agreements and conventions.

15. English language

Adequate knowledge of the English language enabling the skipper to use charts and other nautical publications, to understand meteorological information and measures concerning the vessel's safety and operation, and to communicate with other ships or coast stations. Ability to understand and use the IMO Standard Marine Communication Phrases.

16. Communications

- 16.1. General knowledge of the principles and basic factors necessary for the safe and efficient use of all sub-systems and equipment required by the global maritime distress and safety system (GMDSS).
- 16.2. Knowledge of navigational and meteorological warning systems and the selection of the appropriate communication services.
- 16.3. Knowledge of the adverse effect of misuse of such communication equipment.
- 16.4. Where the Party has examined candidates in these subjects at lower levels of certification, they may have the option of not re-examining in these subjects.
- 16.5. Ability to transmit and receive signals by Morse light and to use the International Code of Signals.

17. Life-saving

- 17.1. A thorough knowledge of life-saving appliances and arrangements.
- 17.2. A thorough knowledge of emergency procedures, musters and drills.

18. Search and rescue

- 18.1. A thorough knowledge of the Merchant Ship Search and Rescue Manual (MERSAR).

19. The FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels

- 19.1. Knowledge of part A of the FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels

20. Methods for demonstration of proficiency

20.1. Navigation

- 20.1.1. Demonstrate the use of sextant, pelorus, azimuth mirror and ability to plot position, course and bearings.

20.2. Demonstrate thorough knowledge of the content, application and intent of the Convention on the International Regulations for Preventing Collisions at Sea, 1972.

- 20.2.1. By the use of small models displaying proper signals or lights or by the use of a navigation light simulator.

20.3. Radar

- 20.3.1. By observation of radar simulators or manoeuvring boards.

20.4. Fire fighting

- 20.4.1. By participation in an approved fire-fighting course.

20.5. Communications

- 20.5.1. By practical test.

20.6. Life-saving

- 20.6.1. By handling of life-saving appliances, including the donning of lifejackets and, as appropriate, immersion suits.
